### **Project Overview**

- Examines implications of M6.7 EQ on Seattle Fault.
- Builds on previous work and current research.
- Prepared by multidisciplinary project team.
- Collaborative public-private effort.
  - American Society of Civil Engineers
  - Structural Engineers Association of Washington
  - United States Geological Survey
  - Cities of Seattle and Bellevue Emergency Management
  - State Emergency Management Division
  - Earthquake Engineering Research Institute
  - University of Washington
  - Cascadia Earthquake Region Workgroup
- About 100 people, more than 3,000 volunteer hours involved in project.

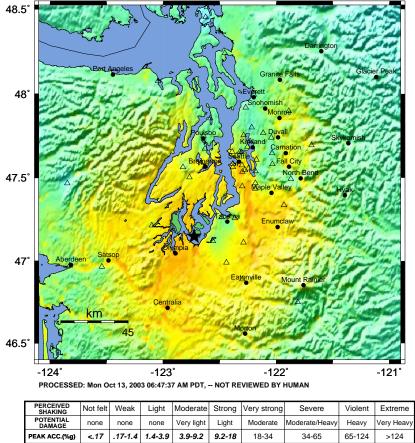


#### Scenario Earthquake Losses

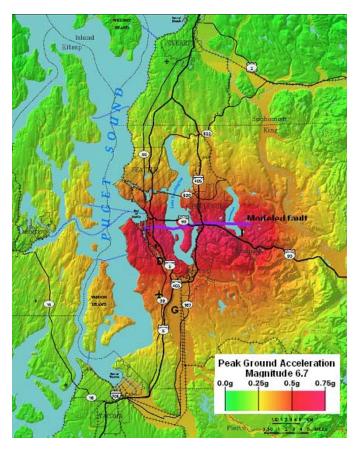
- Damage, economic loss: \$33 billion.
- Deaths: > 1,600.
- Injuries: > 24,000.
- Buildings destroyed: 9,700.
- Buildings unsafe to occupy: > 29,000.
- Moderately damaged buildings, use restricted: > 154,500.
- Fires: 130, damaging nearly a half-billion dollars in property.
- Recovery period Several years.

## **Ground Motions Comparison**

PNSN Rapid Instrumental Intensity Map Epicenter: 17.0 km NE of Olympia, WA Wed Feb 28, 2001 10:54:00 AM PST M 6.8 N47.15 W122.73 Depth: 51.9km ID:0102281854



PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	none	none	none	Very light	Light	Moderate	Moderate/Heavy	Heavy	Very Heavy
PEAK ACC.(%g)	<.17	.17-1.4	1.4-3.9	3.9-9.2	9.2-18	18-34	34-65	65-124	>124
PEAK VEL.(cm/s)	<0.1	0.1-1.1	1.1-3.4	3.4-8.1	8.1-16	16-31	31-60	60-116	>116
INSTRUMENTAL INTENSITY	ı	II-III	IV	V	VI	VII	VIII	IX	X+



Nisqually

Scenario EQ



# Project web site

http://seattlescenario.eeri.org

# Hazard Mitigation Plan Update

- Agencies should be following work plan described in annexes.
- Work plan for state plan revised by May 1.
- New methodology being developed for risk assessment.
  - Agencies must geo-code locations of buildings.
  - EMD match buildings to hazards, provide information back to agencies.
- Agencies complete / revise annexes by early 2007.
- State plan approval required by July 1, 2007.